

The Huygens Mission to Titan: Overview and status

J.-P. Lebreton⁽¹⁾, D.L. Matson⁽²⁾

(1) Research and Scientific Support Department of ESA, ESTEC, P.O. Box 299, 2200 AG Noordwijk, The Netherlands

(2) Jet Propulsion Laboratory, California Institute of technology, 4800 Oak Grove Drive, Pasadena, CA 91109, U.S.A.

email: Jean-Pierre.Lebreton@esa.int

Huygens is an entry probe designed to descend under parachute through the atmosphere of Titan, Saturn's largest moon. The Huygens Probe is provided by the European Space Agency (ESA) for the Cassini/Huygens mission to Saturn and Titan. The Huygens mission will be conducted on the 3rd orbit around Saturn. The probe will be released around December 25, 2004 for entry in Titan on January 14, 2005 at about 9:00 UTC. This paper provides an overview of the Huygens mission and of its payload with emphasis on the measurements that are most relevant to the workshop theme. The status of the probe and of the mission is reviewed. The work done for the Entry and Descent Trajectory Reconstruction is discussed as an introduction to the Huygens-related papers that will follow. The Cassini/Huygens mission is a joint undertaking by NASA and ESA, with ASI (Italian Space Agency) as a partner via a bilateral agreement with NASA.